IN THE CLAIMS

Please amend the claims as follows:

--1. (Amended) A process for separating multibranched paraffins comprised in a hydrocarbon feed comprising hydrocarbons containing 5 to 8 carbon atoms per molecule, wherein said hydrocarbon feed contains linear, monobranched and multibranched paraffins, comprising:

bringing said hydrocarbon feed into contact with at least one zeolitic adsorbent whereby multibranched parafffins are separated from said hydrocarbon feed, and fractionating said hydrocarbon feed into at least two distinct effluents, a first effluent which is rich in multibranched paraffins and has a high octane number, and a second effluent which has a low octane number,

said adsorbent having has at least two types of channels, principal channels with an opening defined by a ring of 10 oxygen atoms and secondary channels with an opening defined by a ring of at least 12 oxygen atoms, said secondary channels only being accessible to said hydrocarbon feed via said principal channels.

- 2. (Amended) A separation process according to claim 1, wherein said adsorbent contains silicon and at least one element T selected from the group formed by aluminium, iron, gallium and boron, the Si/T mole ratio being at least 10.
- 28. (Amended) A separation process according to claim 1, wherein said first effluent rich in multibranched paraffins further contains aromatic and naphthenic compounds.
- 29. (Amended) A separation process according to claim 1, wherein said fractionating of said hydrocarbon feed produces into three distinct effluents, said first effluent which is rich in multibranched paraffins and optionally in aromatic and naphthenic compounds, said second effluent which is rich in linear paraffins, and a third effluent which is rich in monobranched paraffins.
- 30. (Amended) A process according to claim 1, wherein, before said hydrocarbon feed is brought into contact with said at least one zeolitic adsorbent, at least one light fraction is separated from said hydrocarbon feed by distillation, or, after said hydrocarbon feed is

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brought into contact with said at least one zeolitic adsorbent, at least one light fraction is separated from an effluent by distillation.

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31. (Amended) A process according to claim 1, wherein the feed contains a C5 cut, and before said hydrocarbon feed is brought into contact with said at least one zeolitic adsorbent, said hydrocarbon feed is sent to at least one deisopentaniser and/or at least one depentaniser, or after said hydrocarbon feed is brought into contact with said at least one zeolitic adsorbent, an effluent is sent to at least one deisopentaniser and/or at least one depentaniser.--

Please add the following new claims

--35. A process for separating multibranched paraffins comprised in a hydrocarbon feed comprising hydrocarbons containing 5 to 8 carbon atoms per molecule, wherein said hydrocarbon feed contains linear, monobranched and multibranched paraffins, comprising:

bringing said hydrocarbon feed into contact with at least one zeolitic adsorbent whereby multibranched parafffins are separated from said hydrocarbon feed,

said adsorbent having at least two types of channels, principal channels with an opening defined by a ring of 10 oxygen atoms and secondary channels with an opening defined by a ring of at least 12 oxygen atoms, said secondary channels only being accessible to said hydrocarbon feed via said principal channels,

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wherein said zeolitic adsorbent is selected from zeolites with structure type NES, zeolites with structure type MWW, NU-85 zeolites, and NU-86 zeolites.

36. A process for separating multibranched paraffins comprised in a hydrocarbon feed comprising hydrocarbons containing 5 to 8 carbon atoms per molecule, wherein said hydrocarbon feed contains linear, monobranched and multibranched paraffins, comprising:

bringing said hydrocarbon feed into contact with at least one zeolitic adsorbent whereby multibranched parafffins are separated from said hydrocarbon feed,

said adsorbent having at least two types of channels, principal channels with an opening defined by a ring of 10 oxygen atoms and secondary channels with an opening defined by a ring of at least 12 oxygen atoms, said secondary channels only being accessible to said hydrocarbon feed via said principal channels,

wherein said zeolitic adsorbent comprises a zeolite with a EUO, NES, or MWW structure, or an NU-85 or NU-86 zeolite, said zeolitic adsorbent being mixed with a zeolite type LTA.

- 37. A process according to claim 1, wherein said hydrocarbon feed has paraffin content between 30% and 80% by weight.
- 38. A process according to claim 35, wherein said zeolite is a NU-87 zeolite, a SSZ-37 zeolite, a MCM-22 zeolite, a ERB-1 zeolite, a ITQ-1 zeolite, a PSH-3 zeolite, a SSZ-25 zeolite, a NU-85 zeolite or a NU-86 zeolite

39. A process for separating multibranched paraffins comprised in a hydrocarbon feed comprising hydrocarbons containing 5 to 8 carbon atoms per molecule, wherein said hydrocarbon feed contains linear, monobranched and multibranched paraffins, comprising:

bringing said hydrocarbon feed into contact with at least one zeolitic adsorbent whereby multibranched parafffins are separated from said hydrocarbon feed, to produce at least two distinct effluents, a first effluent with a high octane number and a second effluent with a lower octane number, said second effluent with a lower octane number containing linear and monobranched paraffins,

said adsorbent having at least two types of channels, principal channels with an opening defined by a ring of 10 oxygen atoms and secondary channels with an opening defined by a ring of at least 12 oxygen atoms, said secondary channels only being accessible to said hydrocarbon feed via said principal channels, and

recycling said second effluent with a lower octane number to a hydroisomerisation unit, wherein linear and monobranched paraffins with a low octane number are converted to multibranched paraffins with a higher octane number.--